# परीक्षण और प्रमाणन प्रक्रिया संo: टीईसी/एमपी/डीडी/टीसीपी-711/02/अक्तूबर18

TESTING & CERTIFICATION PROCEDURE No.: TEC/MP/DD/TCP-711/02.Oct18

दूरसंचार उपकरणों का अनिवार्य परीक्षण और प्रमाणन प्रक्रिया

संस्करण-2.0

# PROCEDURE FOR MANDATORY TESTING & CERTIFICATION OF TELECOMMUNICATION EQUIPMENT

VERSION-2.0

© टीईसी 2018 © **TEC 2018** 

# भारत सरकार दूरसंचार अभियांत्रिकी केंद्र

खुर्शीद्लाल भवन, जनपथ, नई दिल्ली -110001, भारत

# **GOVERNMENT OF INDIA**

TELECOMMUNICATION ENGINEERING CENTRE

KHURSHID LAL BHAWAN, JANPATH, NEW DELHI – 110001

www.tec.gov.in

# FOREWORD

Telecommunication Engineering Centre (TEC) functions under Department of Telecommunications (DoT), Government of India. Its activities include:

- Issue of Generic Requirements (GR), Interface Requirements (IR), Service Requirements (SR) and Standards for Telecom Products and Services
- Field evaluation of products and Systems
- National Fundamental Plans
- Support to DoT on technology issues
- Testing & Certification of Telecom products

For the purpose of testing, four Regional Telecom Engineering Centres (RTECs) have been established which are located at New Delhi, Bangalore, Mumbai, and Kolkata.

With the notification of Indian Telegraph (Amendment) Rules 2017 enabling mandatory testing and certification of telecom equipment (MTCTE), TEC has been designated as the Telegraph Authority for the purpose of administration of MTCTE procedure and Surveillance Procedure, and for formulation of Essential Requirements under MTCTE.

This document prescribes the procedure for mandatory testing and certification of telecom equipment.

i

Clause	Particulars	Page No.
	Foreword	i
	History Sheet	ii
	Section-I	
1	Short Title And Commencement	1
2	Definitions	1
3	Certification Objectives	4
4	Scope Of Certification	5
5	General	6
6	Certification Schemes	7
7	Technical Regulations	9
8	Fees Payable	9
9	Equipment Labelling	10
10	Certificate Modification	10
11	Renewal	12
12	Revision Of Essential Requirements	12
13	Responsibilities of OEMs/ Importers/ AIRs/ Dealers/ Users	13
	Section-II	
14	Surveillance	14
	Section-III	
15	Non Conformity & Contraventions	15
	Section-IV	
16	Appeals	17
	Section-V	
17	Application Procedure	19
	Annexures	
A1.1	Table-1: List of Equipment Covered by MTCTE	21
A1.2	Table-2: Items Not Covered by MTCTE	24
A1.3	Table-3: Items Presently Not Covered by MTCTE	25
A2	Associated Models And Family Definition	26
A3	Schedule Of Fees	29
A4	Labelling Guidelines	31
A5	Regional TECs	34

# CONTENTS

# **HISTORY SHEET**

S. No.	Document No.	Description	Remarks
1.	-	Draft MTCTE Procedure	Withdrawn
2.	TEC/MP/DD/TCP-711/02/Oct18	MTCTE Procedure V2.0	Current

# <u>SECTION – I</u> MTCTE SCHEME

#### 1.0 SHORT TITLE AND COMMENCEMENT

- 1.1 This document may be called the 'Procedure for Mandatory Testing and Certification of Telecommunication Equipment (MTCTE)'.
- 1.2 These procedures would be applicable for all telecommunication equipment and shall come into force on the 1<sup>st</sup> of October, 2018.
- 1.3 The Indian Telegraph Rules, 1951, PART XI, Testing & Certification of Telegraph, (Rule 528 to 537) provide that every telecom equipment must undergo prior mandatory testing and certification. This document describes the procedure and related framework for implementation of mandatory testing and certification.

#### 2.0 **DEFINITIONS**

- 2.1 In this document, unless there is something repugnant in the subject or context,
  - i. 'Act' means Indian Telegraph Act 1885.
  - ii. 'Applicant' means a company or firm incorporated in India, which may be indigenous Original Equipment Manufacturer (OEM) or a brand owner, or, in case of imported equipment, an importer or an Indian representative of foreign OEM, duly authorized by Foreign OEM.
  - iii. 'Appropriate Authority' means an officer not below the rank of Assistant Director General of Department of Telecommunications or its subordinate or attached offices authorized by the Telegraph Authority.

- iv. 'Associated model' means model of a telecom equipment formed by using chassis/ motherboard and cards/ access ports of another tested and certified model, using the same chassis/ motherboard and a larger superset of cards/ access ports.
- v. 'Authorized Indian representative (AIR) means a company or firm incorporated in India, which, in case of imported equipment, has been duly authorized by Foreign OEM to carry out all obligations required under MTCTE in respect of the imported equipment.
- vi. 'BoM' means Bill of Material, and is a file containing details of all major modules/ components of the model being offered for testing. In case of application for certification of multiple models, the BoM shall include such details of all models.
- vii. 'Certification' means that model of telecom equipment has undergone specified testing and complies with relevant Essential Requirements; such equipment model will be called 'Certified Equipment', and the document conveying the certification will be called the 'Certificate'.
- viii. 'Certification Label' means a mark/ label to be put by manufacturer, after the model of the equipment is certified by TEC.
- ix. 'Designated Conformance Assessment Body' or 'Conformance Assessment Body (CAB)' means a test laboratory designated by TEC for testing of telecom equipment against specified Essential Requirements.
- x. 'Essential Requirements' means set of parameters/ standards/ requirements/ specifications etc. specified by TEC which are to be complied for seeking certification.
- xi. 'Family' means collection of all modules and chases which can be used interchangeably in different combinations to achieve different hardware

configurations meeting different site requirements, which are certified as a whole under MTCTE.

- xii. 'HSE' means Highly Specialized Equipment, and refers to those telecom equipment, which have specialized power, cooling, storage or handling requirements, and limited import/ sale.
- xiii. 'Mandatory Testing & Certification' means testing and certification of telecom equipment as per the procedure described in this document.
- \*Model' means a particular hardware design or version of a product/ equipment bearing a unique model number assigned to the equipment. An equipment, which is different in either of hardware / design / model / version, shall be treated as a different model.
- xi. 'Mutual Recognition Agreement/Arrangement (MRA)' means an agreement through which two countries give recognition to Certifying Bodies and CABs in respective countries.
- xii. 'Prescribed Fee' is the fee charged for granting certification and may include Administrative Fee, Test Result Evaluation Fee, Certification Fee, Certificate Modification Fee etc.
- xiii. 'Provisional Certification' means that model of telecom equipment has undergone specified testing but does not comply with some parts of relevant Essential Requirements; such equipment model will be called 'Provisionally Certified Equipment', and the document conveying the certification will be called the 'Provisional Certificate'.
- xiv. 'RTEC' means Regional offices of TEC, which shall also carry out testing as designated CABs. RTEC, as a designated CAB, may also test the telecom equipment at a location other than itself, if the test facilities are not available in RTEC.
- xv. 'Rule' means The Indian Telegraph Rules 1951 and its amendments.

- xvi. 'Security Wing' means the unit of Department of Telecommunications handling matters related to testing and certification relating to security aspects of telecom equipment/ networks.
- xvii. 'TEC' means the Telecommunication Engineering Centre, New Delhi, under Department of Telecommunications (DoT), which, inter alia, is the Telegraph Authority for the purpose of Testing and Certification.
- xviii. 'Technical Regulations' means product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory.
- xix. 'Telecommunication equipment' also referred to as 'telecom equipment' or 'equipment' is synonymous with 'Telegraph', as defined in Section 3 of Indian Telegraph Act, 1885, and the terms are interchangeable.
- 2.2 Words and expressions used but not defined in this document shall have the meaning respectively assigned to them in the Act or the Rules made thereunder.

#### 3.0 CERTIFICATION OBJECTIVES

- 3.1.1 Certification process endeavors to encourage:
  - that any telecom equipment does not degrade performance of existing network to which it is connected;
  - ii. safety of the end–users;
  - iii. protection of users and general public by ensuring that radio frequency emissions from equipment do not exceed prescribed standards;
  - iv. that telecom equipment complies with the relevant national and international regulatory standards and requirements.

- 3.2 The testing and certification envisaged in this procedure ensures that the equipment meets all TEC prescribed Essential Requirements. The quality and reliability of equipment is not part of this procedure, hence, the same is not guaranteed through this certification. OEMs/ importers/ dealers themselves will be responsible for necessary quality and reliability criteria claimed by them.
- 3.3 Any equipment to be used in Licensed Telecom Service Providers network may have to undergo additional tests as specified in License.

#### 4.0 SCOPE OF CERTIFICATION

- 4.1 The scope of certification would cover all types of telecom equipment to be sold in India for being connected or capable of being connected to Indian telecom network. The effective dates for certification becoming mandatory for different products is notified by the Government separately. For the purpose of clarity, Table-2 under Annexure-I indicates types of equipment not covered by mandatory testing. Further, list of equipment presently exempted from the requirement of mandatory testing under proviso to Rule 529 is given in Table-3 under Annexure-I. Highly Specialized equipment, as notified by Government from time to time are not covered by MTCTE.
- 4.2 The use of certified equipment, unless specifically exempted, shall be governed by extant guidelines, rules/ conditions of license of telecom service provider.
- 4.3 If the equipment is being imported for Research and Development or for demonstration purpose in India or as a sample for mandatory testing, prior TEC certification is exempted.

- 4.4 Any uncertified equipment, which is not prohibited in India by any law, personally accompanied on inward foreign travel to India for personal use, is exempted from mandatory testing and certification on self-declaration.
- 4.5 Equipment that are manufactured/ imported in India but exclusively meant for export are excluded from MTCTE, provided model number/ country variant should be distinct from the model sold in India. Supporting document issued from the state/ central government are required.

#### 5.0 GENERAL

- 5.1 Any Original Equipment Manufacturer (OEM)/ importer/ dealer who wishes to sell or import any telecom equipment in India, shall have to obtain Certificate from Telecommunication Engineering Centre (TEC) and mark or affix the equipment with appropriate Certification label.
- 5.2 Certification needs to be obtained only once for a model of equipment, and is applicable for any quantity of the certified model of the equipment. A different model of the equipment needs separate certification.
- 5.3 However, associated models of the main model/ certified model of the telecom equipment shall be certified without testing. Further, if an equipment is tested and certified under family definition, any hardware configuration of the equipment formed by using a subset of modules/ chases from the family shall be treated as certified. Broad criterion for qualifying a model as associated model and definition of family is given in Annexure-II.
- 5.4 Only complete-in-itself, standalone, independent equipment are tested and certified under MTCTE. Equipment modules/ components are not covered by MTCTE. Further, combination of independent equipment made to form systems are not certified under MTCTE; instead, each independent equipment should be certified separately.

- 5.5 The equipment needs to be tested only in a designated CAB, or recognized CAB of MRA partner country. The test results/ test reports shall not be older than one year on the date of submission.
- 5.6 As a relaxation, test reports/ results from any lab accredited by accreditation bodies under ILAC shall be accepted until 31 March 2019. The test results/ test reports submitted during this period shall not be older than five years on the date of submission.
- 5.7 The issued certificate shall be valid for five years from the date of issue.
- 5.8 TEC may amend/ suspend/ cancel the certificate, if it comes to the knowledge of TEC that any violation of the Rules has taken place.
- 5.9 TEC may issue such directions to OEMs/ importers/ dealers/ users, consistent with the Act, Rule or this procedure, as may be necessary, for carrying out purpose of this Procedure.
- 5.10 The certification procedures, which are detailed in this document, are subject to revision from time to time.

#### 6.0 CERTIFICATION SCHEMES

- 6.1 General Certification Scheme (GCS)
- 6.1.1 This scheme is applicable for all telecom equipment listed in Table-1 of the Annexure-I, against which GCS is indicated. This list is updated from time to time and updated version of this list available on MTCTE portal is always to be referred to.
- 6.1.2 Under this scheme, applicant shall be required to submit test wise compliance along with test reports, in respect of parameters included in ERs, from any designated CAB or recognized CAB of MRA partner country. The test results shall be evaluated for compliance against respective ERs.

- 6.1.3 If equipment is found compliant with all applicable Essential Requirement parameters, a Certificate shall be issued to the applicant along with labelling details, for the specific model of equipment.
- 6.1.4 In case where valid Type/ Interface Approval Certificate (TAC/ IAC) issued by TEC, or TSEC issued by BSNL based upon TEC GR/ IR is in vogue for any particular equipment, only incremental testing and result evaluation is required for issue of certificate. The validity of this certificate shall be for the remaining period of TAC/ IAC/ TSEC.
- 6.1.5 In case, for any equipment, variant or interface, Essential Requirements are not listed on the MTCTE portal, the applicant may submit the requisite details on the portal. TEC will examine the details and will specify provisional ERs against which the equipment can be tested and complied. On evaluation of test results, a provisional certificate with one-year validity shall be issued.
- 6.1.6 A regular ER shall be issued by TEC for the equipment for which provisional ER was issued earlier. The equipment should be got certified against regular ER before expiry of validity of provisional certificate.
- 6.2 Simplified Certification Scheme (SCS)
- 6.2.1 This scheme is applicable for all equipment listed in Table-1 of the Annexure-I against which SCS is indicated.
- 6.2.2 Under this scheme, applicant has to submit a test wise compliance sheet, along with a Self-Declaration of Conformity (SDoC), in respect of parameters included in ERs.
- 6.3.3 All other rules/ procedures applicable in case of GCS shall apply in case of SCS, except that test reports are not required to be submitted by applicant or evaluated by TEC. TEC, however, reserves the right to ask the applicant to submit copy of report in case of SCS also.

## 7.0 TECHNICAL REGULATIONS

- 7.1 The technical regulations prescribed under this framework are in the form of Essential Requirements. The Essential Requirements (ER) to be complied for the purpose of certification under this procedure will include following:
  - i. EMI/ EMC : As prescribed by TEC
  - ii. Safety : As prescribed by TEC
  - iii. Technical requirements: As prescribed by TEC
  - iv. Other requirements: As notified by TEC/ DoT/ any Government Agency from time to time
  - v. Security Requirements: As per notification issued by DoT.
- 7.2 The current ER available on the online portal needs to be complied.
- 7.3 If ER is not available, a Provisional ER will be prescribed on the request of applicant.
- 7.4 If ER is amended, it will be applicable from a prospective date indicated in the ER. Until that time, existing ER will be applicable.

## 8.0 FEES PAYABLE

- 8.1 The Fees charged under MTCTE consist of Administrative Fee (for SCS and GCS both) and additionally Test Report Evaluation Fee (for GCS).
- 8.2 Equipment covered by MTCTE are grouped according to the time and complexity involved in testing the equipment or evaluating test reports. The Schedule of Fees applicable for different groups is given in Annexure-III.
- 8.3 In case applicant opts for testing in one of the TEC/ RTEC labs, applicable test fee shall be charged separately.
- 8.4 All fees are non-refundable.

8.5 The fees are to be deposited during the application process on MTCTE portal. During processing, the MTCTE portal will lead the user to the Non-Tax Revenue Portal (NTRP) for online payment.

#### 9.0 EQUIPMENT LABELLING

- 9.1 OEM/ Importers/ Dealers shall ensure that equipment offered for sale/ use in India is clearly marked or affixed with the following:
  - i. the OEM's/ Brand's name;
  - ii. the equipment's trade name, model name and serial number;
  - iii. relevant certification label
- 9.2 The detailed labelling guidelines are given in Annexure-IV.

#### 10.0 CERTIFICATE MODIFICATION

- 10.1 Certificate modification without re-testing:
- 10.1.1 Change in ownership of equipment/ brand or modifications performed on the certified equipment that do not affect compliance with approved Essential Requirements will require certificate modification without going through the process of testing. In such cases, certificate holders should apply online for certification of the modified equipment/ modified ownership. After examination of the application, a new certificate will be issued reflecting the changes. Certificate holders may continue to sell such modified equipment after recertification by TEC. Examples of such modifications are:
  - Change in model number/ name arisen due to change in size, shape, color or enclosure of equipment;
  - ii. Change in model number without affecting the hardware design.

- iii. Change in ownership/ structure/ address of company holding the certificate for the equipment.
- iv. Inclusion of name of a new Associated Model not originally available on the existing certificate, but covered by BoM already submitted.
- 10.1.2 TEC may call for re-testing/ re-evaluation of certified telecom equipment and charge the relevant fee, should the need arise to check on the compliance of the equipment to the ERs.
- 10.2 Certificate Modification with re-testing:
- 10.2.1 Any other modifications performed on the certified equipment that affects its conformance with approved Essential Requirements will warrant fresh certification. Some examples (not limited to following) of such modifications are:
  - i. Addition of new network interface card;
  - ii. Change in the existing network interface card;
  - iii. Inclusion of a new Associated Model neither originally mentioned on the existing certificate, nor covered by BoM of certified model.
  - iv. Inclusion of a new chasses, interface module or unit in the family of already certified equipment.
- 10.3 In case of modifications affecting ER conformance, certificate holders should apply online and the equipment shall have to undergo incremental testing, as applicable. The modified equipment shall be sold or used only after fresh certificate is issued by TEC.
- 10.4 Any modification in the certified product without obtaining certificate modification shall amount to use of uncertified equipment and shall be dealt accordingly.

- 10.4 Modifications that cannot be differentiated as incremental change shall be treated as fresh application.
- 10.5 The validity of modified certificate shall be for balance period of five years.
- 10.6 A change in software, by way of major revision/ minor revision/ patch/ bug fix/ update does not necessarily call for certificate modification, unless the change has resulted in non-conformity or non-compliance to ERs, to which the equipment was earlier compliant. The OEM himself is responsible for ascertaining the same and applying for certificate modification, should the need arise.

#### 11.0 RENEWAL

- 11.1 For renewal, a Certificate holder must apply online and pay the renewal fee, at least one month prior to expiry of the current certificate's validity period.
- 11.2 A certificate shall be renewed only if there is no change in the Essential Requirements applicable to the equipment, and there is no change in the equipment model.
- 11.3 After evaluation of the renewal application, a fresh certificate valid for another five years shall be issued, indicating the previous certificate number thereon.
- 11.4 TEC may call for re-testing/ re-evaluation of certified telecom equipment and charge the relevant fee, should the need arise to check on the compliance of the equipment to the ERs.

#### 12.0 REVISION OF ESSENTIAL REQUIREMENT

12.1 Technological developments, changes in international standards or other regulatory requirements may entail revision of Essential Requirement.

- 12.2 Essential Requirements will generally be issued along with a prospective date of effect indicated thereon.
- 12.2 The revision of Essential Requirement shall not generally affect the validity of certificate of already certified Telecom Equipment. Equipment for which applications are received after the notified date of effect of amended ER shall be required to be certified against amended ER.

#### 13.0 RESPONSIBILITIES OF OEMs/ IMPORTERS/ AIRs/ DEALERS/ USERS

- 13.1 An OEM/ dealer shall not sell the equipment and an importer/ AIR shall not import a telecom equipment until it has been certified by TEC and the Certification Label is applied, affixed or embossed on the equipment.
- 13.2 The equipment to be sold/ used must be of the same model that has been certified.
- 13.3 If need arises, OEM/ Importer/ AIR should offer the certified equipment for further tests and evaluation, as and when directed by TEC.
- 13.4 An OEM/ importer/ AIR/ dealer must cease to sell the uncertified telecom equipment if so directed by TEC and dispose of such equipment, at his own expense in the manner directed by TEC.
- 13.5 Telecom licensees should use certified telecom equipment only in their network.
- 13.6 As the certification issued under this procedure ensures that the certified equipment has been tested for conformance to Safety, EMIC/ EMC, Security and other technical requirements including SAR, public is advised to buy/ use certified telecom equipment only, in their own interest of safety and security.

# **SECTION - II**

#### 14.0 SURVEILLANCE

- 14.1 Telegraph Authority/ Appropriate Authority(AA) reserves the right to inspect and/ or test any telegraph, which requires mandatory certification at any time and at any premises including sites where it is in use or at the place of manufacturing to ensure that the telegraph used/ sold has required certifications and/ or conforms to the Essential Requirements of existing certifications. Such inspection and/ or testing may be carried out periodically, or at the discretion of Telegraph Authority/ Appropriate Authority or due to any complaint.
- 14.2 Detailed procedure for surveillance shall be notified separately.

# **SECTION - III**

#### 15.0 NON CONFORMITY & CONTRAVENTIONS

15.1 If it comes into the notice of the Telegraph Authority/Appropriate Authority (AA) that

(i) an uncertified equipment or certified equipment with unauthorized modifications or equipment whose certification has expired is being sold/ used or intended to be sold/ used, or

(ii) a certified equipment is not conforming to the Essential Requirements for which the certification has been issued; then

- AA will issue a notice of violation inter-alia ordering to stop the sale/ use of the uncertified equipment with immediate effect.
- b) Such telegraph will be required to undergo the mandatory certification within one hundred and eighty days from the date of issue of notice of violation. For the same, the telegraph authority will charge ten times of the prescribed fee and after observing the procedures as specified may issue the Certificate.
- c) In case certification is not obtained for such telegraph within stipulated timeframe, AA may order to take custody of all such telegraph and may order to destroy the telegraph.
- 15.2 If it comes into the notice of the Telegraph Authority/ Appropriate Authority (AA) that any entity/ entities that are licensed under the Act, are using any uncertified equipment or failing in taking action against use of uncertified equipment by user, as prescribed in Rule 536 then;

- AA will issue a notice of violation inter-alia ordering it to stop the use of the uncertified equipment with immediate effect and will take actions as per the provisions of their license conditions.
- b) However, AA may allow getting the mandatory certification done within one hundred and eighty days from the date of issue of notice of violation. For the same, the telegraph authority will charge ten times of the prescribed fee and after observing the procedures as specified may issue the Certificate.
- 15.3 Prescribed fee as indicated in previous clause shall mean the applicable fees as given in para 8.0.
- 15.4 Unlawful/ unauthorized/ fraudulent/ forged use of certification label by anyone shall be a criminal offence and relevant penal provisions of Indian Penal Code shall apply.

# SECTION - IV

#### 16.0 APPEAL

- 16.1 This section describes the procedure for dealing with appeals received from the Appellant (i.e. OEM/ Importer/ AIR) against any adverse decisions taken by TEC/ AA with respect to their certification application, e.g. refusal to accept an application, refusal to accept test results/ reports, refusal to proceed with evaluations, refusal to grant certification, decisions to close the application or deny certification or any adverse action imposed/ taken. Appellant may also appeal against AA's decision to put the certification under abeyance, suspend, or forced withdrawal of certification, or any other action that impedes the attainment of certification.
- 16.2 Appeal shall be made to Appeals Officer, TEC in writing, within 30 days from the date of adverse decisions.
- 16.3 Initially the appeals shall be examined by Appeals Officer for its validity and if prima-facie they appear to be valid and having some substance, they will be taken up for further actions or otherwise the appellant will be informed appropriately. Appeals Officer shall acknowledge the receipt of appeals.
- 16.4 Admitted appeals shall be placed before the designated Appeals Committee. Designated appeals committee may consist of three members nominated by AA.
- 16.5 While nominating members for the Committee, Appropriate Authority shall ensure that the nominated members are not directly involved in the decision-making process for the appellant.
- 16.6 Designated Appeal Committee is responsible for considering the appeal. An opportunity will be given to the appellant to present the appeal in person(s)

during the process of hearing of appeal. The appellant may depute his/ her representative for hearing; however, the deputed representative(s) should be from its staff only. The dealing officer involved in the adverse decision may also provide technical inputs but shall not be involved in the decision making of the Appeal Committee.

- 16.7 After examination of the appeal, the committee may seek clarifications and information from all appropriate sources. If considered necessary, the Committee shall ask TEC to depute its staff or expert to investigate the matter.
- 16.8 Based on the data gathered through any of the above stated means, the Appeal Committee shall make the final decision within a reasonable time and the Appellant shall be informed accordingly by Appeal Officer. Appeal Officer shall also inform the dealing officer of that particular case regarding the outcome of appeal.
- 16.9 At any time during the review, the appellant may withdraw the appeal in writing. However, if for any reason, an appeal is withdrawn, a future appeal on the same grounds shall not be considered.
- 16.10 The Appeal Officer shall maintain record pertaining to all appeals including important details like date of receipt, name and address of the Appellant, details of appeal, outcome and final disposal. No further appeal in this regards will be considered.
- 16.11 This procedure of Appeal will not be applicable for adverse action(s) taken by Telegraph Authority under provisions of license conditions.
- 16.12 The names of Appeals Officer and members of Appeals Committee shall be notified by TEC separately.

# **SECTION-V**

#### 17.0 APPLICATION PROCEDURE

- 17.1 The application process shall be online through MTCTE Portal www.mtcte.tec.gov.in.
- 17.2 The applicant may register online and upload relevant documents in support of (i) Company Registration (ii) Letter issued by company authorizing him for MTCTE related responsibilities. Additionally, in case of foreign OEMs, the applicant from Indian company shall upload documents in support of (iii) MoU between foreign OEM and Indian representative (AIR) for sale and support of the product in India, and (iv) authorizing the AIR for MTCTE related responsibilities.
- 17.3 The documents shall be scrutinized by TEC. Any shortcoming in documents shall be intimated to the applicant. After rectification of shortcomings, applicants registration shall be approved, after which he may submit applications for testing/ certification.
- 17.4 Applicant shall select product to be certified, its variant details, available interfaces and associated models information, if applicable, and shall upload BoM file on the portal. After submission of his application, applicant will be shown the applicable certification scheme, ER and fee.
- 17.5 After payment of fee, applicant shall be asked to submit test results/ reports.
- 17.6 In case the applicant select the option of "reports not available", he is directed to testing section of MTCTE portal, wherein he can select CAB(s) of his choice for testing. After testing and uploading of test results/ reports by CAB(s), applicant can resume the application by selecting "All reports available".

- 17.7 If it is case of SCS, applicant shall submit test results, and accept the online self-declaration of conformity (SDoC). The submitted test results will be examined and if the equipment is found to be compliant, certificate will be issued.
- 17.8 If it is case of GCS, applicant shall submit test results, shall upload test reports, and shall accept online undertaking regarding correctness of uploaded documents/ reports. The test results/ reports will be examined and if the equipment is found to be compliant, certificate will be issued.
- 17.9 Telecom Equipment shall be tested in Designated CAB or recognized CAB of MRA partner country. However, Telegraph authority may allow acceptance of test results/ test reports for some or all tests from any other source for some limited period as a relaxation to this procedure.
- 17.10 All the submitted documents and communication with TEC should be in Hindi or English language only. If any submitted document is in any other language, then its certified English translation should also be submitted simultaneously.
- 17.11 Application for testing by RTECs can be submitted through concerned section of MTCTE portal. The contact details and jurisdiction of RTECs are given in Annexure-V.

# **ANNEXURE-I**

# Table-1

<u>د</u>	Name of Equipment		
S.	Name of Equipment	Certification	Product
No.		Scheme	Fee Group
1.	Executive Telephone System	scs	А
2.	NSD/ISD Payphone	SCS	А
3.	Electronic Telephone Instrument	SCS	А
4.	Key Telephone Systems	SCS	А
5.	2-Line Feature Phone	SCS	А
6.	Coin Box Telephone	SCS	А
7.	Terminals for connecting to PSTN	SCS	А
8.	CLIP Phone	SCS	А
9.	Audio Conferencing Facility Device	SCS	А
10.	Multi Line Telephone System	SCS	А
11.	Group 3 FAX Machine	SCS	А
12.	Modem	SCS	А
13.	Cordless Phone	GCS	А
14.	Point of Sales (POS) Terminal	GCS	А
15.	GPON Equipment	GCS	В
16.	DSL Equipment	GCS	В
17.	IoT Gateway	GCS	В

# List of Equipment Covered by MTCTE

18.Tracking DevicesGCSB19.Smart Electricity meterGCSB20.Smart WatchGCSB21.Smart Security CameraGCSB22.RouterGCSC23.LAN SwitchGCSC24.Mobile Handsets and DonglesGCSC25.Mobile BTSGCSC26.Compact Cellular NetworkGCSC27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC37.Soft SwitchGCSC				
20.Smart WatchGCSB21.Smart Security CameraGCSB22.RouterGCSC23.LAN SwitchGCSC24.Mobile Handsets and DonglesGCSC25.Mobile BTSGCSC26.Compact Cellular NetworkGCSC27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	18.	Tracking Devices	GCS	В
21.Smart Security CameraGCSB22.RouterGCSC23.LAN SwitchGCSC24.Mobile Handsets and DonglesGCSC25.Mobile BTSGCSC26.Compact Cellular NetworkGCSC27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	19.	Smart Electricity meter	GCS	В
22.RouterGCSC23.LAN SwitchGCSC24.Mobile Handsets and DonglesGCSC25.Mobile BTSGCSC26.Compact Cellular NetworkGCSC27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking SystemGCSC31.EquipmentGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	20.	Smart Watch	GCS	В
23.LAN SwitchGCSC24.Mobile Handsets and DonglesGCSC25.Mobile BTSGCSC26.Compact Cellular NetworkGCSC27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	21.	Smart Security Camera	GCS	В
24.Mobile Handsets and DonglesGCSC25.Mobile BTSGCSC26.Compact Cellular NetworkGCSC27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking SystemGCSC31.EquipmentGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	22.	Router	GCS	С
25.Mobile BTSGCSC26.Compact Cellular NetworkGCSC27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	23.	LAN Switch	GCS	С
26.Compact Cellular NetworkGCSC27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	24.	Mobile Handsets and Dongles	GCS	С
27.Mobile RepeaterGCSC28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSB32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	25.	Mobile BTS	GCS	С
28.Microwave Communication EquipmentGCSC29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSB32.Satellite System equipmentGCSC33.IP TerminalGCSC34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	26.	Compact Cellular Network	GCS	С
29.UHF/ VHF Communication EquipmentGCSC30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSB32.Satellite System equipmentGCSC33.IP TerminalGCSB34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	27.	Mobile Repeater	GCS	С
30.Mobile Radio Trunking System EquipmentGCSC31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSB32.Satellite System equipmentGCSC33.IP TerminalGCSB34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	28.	Microwave Communication Equipment	GCS	С
EquipmentEquipment31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSB32.Satellite System equipmentGCSC33.IP TerminalGCSB34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	29.	UHF/ VHF Communication Equipment	GCS	С
31.Equipment Operating in 2.4 GHz and 5 GHz Frequency BandsGCSB32.Satellite System equipmentGCSC33.IP TerminalGCSB34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	30.	Mobile Radio Trunking System	GCS	С
GHz Frequency BandsGCSC32.Satellite System equipmentGCSC33.IP TerminalGCSB34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC		Equipment		
32.Satellite System equipmentGCSC33.IP TerminalGCSB34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	31.	Equipment Operating in 2.4 GHz and 5	GCS	В
33.IP TerminalGCSB34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC		GHz Frequency Bands		
34.Media GatewayGCSC35.Signalling GatewayGCSC36.Session Border ControllerGCSC	32.	Satellite System equipment	GCS	С
35.     Signalling Gateway     GCS     C       36.     Session Border Controller     GCS     C	33.	IP Terminal	GCS	В
36.     Session Border Controller     GCS     C	34.	Media Gateway	GCS	С
	35.	Signalling Gateway	GCS	С
37. Soft Switch GCS C	36.	Session Border Controller	GCS	С
	37.	Soft Switch	GCS	С

38.	ISDN CPE	SCS	А
39.	PABX	GCS	В
40.	Telephony Application Server	GCS	С
41.	Telephony Media Server	GCS	С
42.	Multiplexing Equipment	GCS	С
43.	SDH Equipment	GCS	С
44.	DWDM Equipment	GCS	С
45.	Digital cross Connect	GCS	С

Note: The list of equipment covered by MTCTE is updated from time to time. The updated list can be downloaded from <u>www.mtcte.tec.gov.in/</u>.

# **ANNEXURE-I**

# Table-2

# Items Not Covered by MTCTE

S. No.	Name of Equipment	Examples
1.	Modules/ Spares/ Components/ SKD/ CKD	Spare cards, return repair, WiFi modules
2.	Test Instruments	RF Tester, Power Meter
3.	Hobby Assembling	Self-assembled Amateur Radio
4.	Passive Telecom Components	Tower, Antenna, Waveguide, smart cards
5.	Integrated systems and networks consisting of more than one telecom equipment, each of which are individually covered by MTCTE.	GPON is not certified. OLT, ONT and ONU are independent components of GPON and each are certified independently.
6.	Power supply/ UPS/ Solar equipment/ Batteries	
7.	Equipment that are manufactured/ imported in India but exclusively meant for export	

# **ANNEXURE-I**

# Table-3

# Items Presently Not Covered by MTCTE

S. No.	Name of Equipment	Examples/ Remarks
1.	IoT sensors and inter-sectoral devices with propriety communication interfaces only.	Temperature sensor, Agricultural Sensor
2.	Primarily non-telecom electrical and electronic products with Wi-Fi/ NFC/ BT etc.	AC or Fridge with WiFi, Lights with BLE remote control
3.	Multi-functional devices with Wi-Fi/ Ethernet ports primarily meant for trans-receiving images.	Multi-functional Printer/ Scanner/ Fax
4.	Equipment with communication module specifically covered by mandatory scheme of any other Government agency.	Laptop with WiFi.
5.	Set Top Box (presently under CRS)	ERs/ certification
6.	Enterprise Digital Assistant	procedure for these
7.	Laptops with Cellular connectivity	products shall be notified later.

## **ANNEXURE-II**

#### Associated Models and Family Definition

- A2.1 Each model of a telecom product needs to tested and certified under MTCTE once. However, in the following cases, more than one models can be covered by a single certificate:
- A2.1.1 Pizza Box Models: In such equipment, generally a single PCB or motherboard is used for creating number of different models. These hardware models are created by providing different combination or configuration of access ports. In this case, if one pizza box model built around a particular motherboard having largest configuration of ports is tested and certified, all other models built around the same motherboard with a different lower configuration of interfaces/ access ports shall be covered by the same certificate.
- A2.1.2 Chases based Models: Such equipment generally consist of a single chassis with the same backplane, and common function cards like processor or logic card, power supply card and other common control cards are present in the chassis. Different hardware variant models are formed by inserting different combination of functional cards (like frequency filter cards or interface cards) in the chassis. In this case, if one model built on one chassis populated with largest variety of interface cards is tested and certified, all other models built around the same chassis by inserting another combination of the same or lower number of interfaces shall be covered by the same certificate.
- A2.1.3 Family based Models: Such equipment families generally consist of a number of chases with varying capacities, and a large number of cards, all of which can be inserted in any of the chases in the family

interchangeably. Depending upon customer requirement, different combination of chases from the family and different combination of cards are used at one site, which can be closely called one model. In this case, if all chases of the family are tested and certified separately or collectively, and all cards in the family are tested and certified by inserting them in whatsoever chassis, then all other models built by selecting some of the chases and some of the cards from the pool of tested chases and cards shall be covered by the same certificate.

- A214 Split Unit Type Models: Such equipment generally consist of two functionally independent units, like an indoor unit and an outdoor unit, or a baseband unit and a radio unit. Safety and EMI/EMC testing of individual unit is possible in isolation, but technical parameter testing can be carried out only when the two units are connected. Each of the two units are often in different varieties; mostly the outdoor or radio unit variety is based upon frequency of operation and power capability, and the indoor or baseband unit variety is based upon chassis size, interface cards etc. In such cases, if all the outdoor or radio units have been individually tested with any (one or more) of the indoor or baseband units, and all the indoor or baseband units have been individually tested with any (one or more) of outdoor or radio units, the collection of all such indoor or baseband units and all outdoor or radio units will be treated as a family and will be certified accordingly. Further, the concept of associated model may be applied to indoor or baseband units, if these meet the criteria.
- A2.2 In case of Pizza box models and chases based models, the model with largest configuration is called the tested model. The other models built around the same motherboard are called Associated Models.

- A2.3 Where plug-in type of interface modules are used, if module with highest port density is tested, module with lower port density need not be tested.
  However, a module with two different types of ports will be treated as different from a module with either type of ports, and needs to be tested.
- A2.4 Maximum 10 number of associated models can be included in one certificate, the tested model being one of the 10.
- A2.5 Model numbers of all associated models need to be indicated in the online application in the corresponding BoM file.
- A2.6 In case of radiating equipment, the model with highest radio power level is tested. The model of radio equipment with lower power will be covered by the same certificate under family based models.
- A2.7 In case of radiating equipment with different frequency band, tests are required to be carried out on all frequency band.

# **ANNEXURE-III**

#### Schedule of Fees

- A3.1 Administrative Fee: Applicable for all products, as per respective product group indicated in Table 1 of Annexure-I.
- A3.2 Test Report Evaluation Fee: Applicable in addition to Administrative Fee, only for products under GCS, as per respective product group indicated in Table 1 of Annexure-I.
- A3.3 Certificate Modification Fee: Applicable if application for certificate modification is made, and no testing or report evaluation is involved. The amount of this fee is same as Administrative fee, for the respective product group. In case testing and test report evaluation is involved, respective fees will be charged in addition.
- A3.4 Renewal Fee: Applicable if application for renewal of certificate is made, and no testing or report evaluation is involved. The amount of this fee is same as Administrative fee, for the respective product group.
- A3.5 Testing Fee: In case of testing by CABs, fees as charged by CABs shall be payable directly to the CAB, without involvement of MTCTE portal. In case of testing in RTEC Labs, testing fee as notified by TEC separately, shall be payable through MTCTE portal.
- A3.6 Fees for Contravention: In case of contraventions of requirements of mandatory testing, the fee as required under para 15.2 shall be ten time of the applicable fee as per para A3.1 and A3.2.

Group of	Administrative Fee/	Test Report Evaluation Fee
Equipment	Certificate Modification Fee/	₹
	Renewal Fee ₹	
A.	10,000	50,000
В.	20,000	1,00,000
C.	30,000	2,00,000
D.	50,000	4,00,000

A3.7 The fees as indicated in para A3.1, A3.2, A3.3 and A3.4 are as follows:

# ANNEXURE-IV

### Labelling Guidelines

- A4.1 The certification label required under clause 9.1 (iii) of MTCTE includes the TEC Logo, and the certification number as given by TEC in the issued certificate.
- A4.2 The TEC labelling requirements consists of:
  - i. TEC Logo on body of equipment.
  - ii. Indication of equipment conforming to Essential Requirements in its technical document.
  - iii. TEC Certification e-label, only in case of mobile handset and tablets
- A4.3 The TEC Logo on body of equipment needs to conform to following guidelines:
- A4.3.1 The 'TEC certification label' consists of the pictorial representation of TEC logo, drawn in the exact style as indicated in the following. If the size of TEC logo is reduced or enlarged, the aspect ratio given in the figure must be maintained.



- A4.3.2 The height of TEC logo shall be 1/4th of the size of the brand name, subject to a minimum height of 6 mm and maximum height of 12 mm.
- A4.3.3 The TEC logo can be engraved, raised, embossed or debossed or printed label affixed.
- A4.3.4 In case of engraving or debossing of TEC Certification label, Figure 1 given in the guidelines may be referred. The TEC logo (in color) has to be engraved/ debossed while the other portion of the label (in white) is to be flush with product body surface.
- A4.3.5 If the logo is raised or embossed, then the TEC logo shown in Figure 2 (in white) has to be raised while the other portion (in color) is to be engraved.
- A4.3.6 If the TEC logo is color printed and affixed, then the color composition given in the attached figure (RGB=0,108,156) must be maintained with no significant variation in color. However, black and white label is also permitted (colored=black, white=white).
- A4.3.7 The 'TEC certification label' shall be legible, indelible, non-removable and should be easily discernable under normal lighting conditions.
- A4.3.8 The 'TEC certification label' shall be put on the product at a prominent location so that it is clearly visible to the user. However, in case of removable or user replaceable outer cover (e.g. back cover in case of few mobile models) it can be placed below removable cover.
- A4.3.9 The durability of label shall be tested as per the ISO 28219:2009.
- A4.4. The technical manual of the product should contain the information that this product conforms to the relevant Essential Requirements of TEC.
- A4.5.1 The 'TEC certification e-label' consists of the Name of Country "INDIA", Certificate Number of the certificate issued for the device under MTCTE, the device's model number, and TEC Logo, as given in following figure.



- A4.5.2 The device shall not require any special accessory/ tool or supplemental plug-in (e.g., the installation of a SIM/ USIM card) to access the e-label.
- A4.5.3 The compliance related information shall be programmed by the manufacturer and the information shall be secured in such a manner that third party cannot modify it.
- A4.5.4 The information can be in the firmware or software menu provided it is easily accessible and cannot be modified.
- A4.5.5 The compliance related information should be placed in the section containing regulatory information about the device.
- A4.5.6 Users shall be able to access the information without requiring special access codes or permissions and, in all cases; the information shall be accessible in no more than four steps in a device's menu.
- A4.5.7 Instructions on how to access e-label shall be included in the user's manual, operating instructions, or as an insert in the package of the product, or other similar means.
- A4.5.8 Alternately, the instructions to access the information may be available on the product related website. The instructions on how to access the website shall be provided in the user's manual or package of the product.
- A4.6 Manufacturers may initiate advance action for labelling the equipment before issue of certificate by TEC, after ascertaining at their own level that the equipment conforms to relevant ER, and the product would conform to relevant ER when tested in the designated CAB under MTCTE.

# **ANNEXURE-V**

## **Regional TECs**

All enquiries regarding testing of equipment should be addressed to Regional Telecommunication Engineering Centre (RTEC). The contact detail along with jurisdiction of present RTEC are as under:

Concerned officer	Jurisdiction	e-mail
Deputy Director General (N), RTEC New Delhi	Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab, Rajasthan, Uttarakhand and Uttar Pradesh.	ddgnr.tec@gov.in
Deputy Director General (W) RTEC Mumbai	Chhattisgarh, Daman & Diu, Dadara & Nagar Haveli, Goa, Gujarat, Madhya Pradesh and Maharashtra.	ddgwr.tec@gov.in
Deputy Director General (E) RTEC Kolkata	Assam, Arunachal Pradesh, Andaman & Nicobar, Bihar, Jharkhand, Meghalaya, Manipur, Mizoram, Nagaland, Odisha, Sikkim, Tripura and West Bengal.	ddger.tec@gov.in
Deputy Director General (S) RTEC Bengaluru	Andhra Pradesh, Karnataka, Kerala, Lakshadweep, Tamil Nadu, Telangana, Puducherry	ddgsr.tec@gov.in